

In the claims:

Claims 1 to 10 canceled.

11. (currently amended) A method of making a stator of an electric machine, said method comprising:

- a) making individual generally strip-shaped laminas (15) for the stator;
- b) stacking the individual laminas (15) to form a stator core (13) with a yoke having a yoke height, so that one side of the stator core is provided with grooves (18) extending through the core;
- c) producing a subassembly by inserting a stator winding (17) into the grooves (18) of the stator core (13) formed in step b);
- d) bending the subassembly in a circular fashion to form a cylindrical cavity, so that the grooves (18) end in the cavity; and
- e) in order to keep the subassembly in a configuration with the cylindrical cavity, connecting at least two ends (23) of the stator core (13) to each other by means of a welding seam (20); and
- f) selecting a depth of the welding seam to give the welding seam a sufficient strength to absorb tensile forces occurring in the welding seam, but at the same time not to exert too excessive a negative influence on magnetic properties at a welding point due to structural changes occurring in the yoke, said selecting including selecting wherein a welding seam depth ( $T_s$ ) of the welding seam (20) is as a function of the yoke height ( $H_{yoke}$ ) and a tolerance value ( $\Delta T_s$ )

and is given in accordance with the following formula (I):

$$T_S = 0.5 \text{ mm} * (H_{\text{yoke}}/\text{mm} - 1) \pm \Delta T_S \quad (I).$$

12. (currently amended) The method as defined in claim 11,  
~~wherein~~ further comprising selecting the tolerance value ( $\Delta T_S$ ) ~~equals~~ 1.0 mm.

13. (currently amended) The method as defined in claim 11,  
~~wherein~~ further comprising selecting the tolerance value ( $\Delta T_S$ ) ~~equal~~ to be equal  
0.5 mm.

14. (currently amended) The method as claimed in claim 11,  
~~wherein~~ further comprising selecting welding seam depth ( $T_S$ ) of the welding  
seam (20) ~~is to be~~ not less than a minimum value ( $T_{Smin}$ ) and said minimum value  
( $T_{Smin}$ ) ~~depends to be dependent~~ on the yoke height ( $H_{\text{yoke}}$ ) and ~~is to be~~ described  
by the following formula (II):  $T_{Smin} = \{3/40\} * H_{\text{Yoke}}$ .

15. (currently amended) The method as claimed in claim 11,  
~~wherein~~ further comprising providing the stator core (13) ~~comprises with~~ a yoke  
(26) and arranging the welding seam (20) ~~is arranged~~ on a radial outside (30) of  
the yoke (26).

16. (currently amended) The method as claimed in claim 11,

~~wherein~~further comprising providing the stator core (13) ~~comprises~~with a plurality of teeth (25), arranging the welding seam (20) ~~is arranged~~ on a radial outside (30) of the yoke (26) and arranging the welding seam (20) ~~is arranged~~ in one of said teeth, with said one of said teeth comprising two partial teeth (24).

17. (currently amended) The method as claimed in claim 11,  
~~wherein~~further comprising disposing the welding seam (20) ~~is disposed~~ on at least one axial end of the stator core (13).

18. (previously presented) The method as claimed in claim 11,  
further comprising making the welding seam by a laser welding process with a laser beam.

19. (currently amended) An electric machine comprising a stator (10) made by a method, which comprises:

- a) making individual generally strip-shaped laminas (15) for the stator;
- b) stacking the individual laminas (15) to form a stator core (13) with a yoke having a yoke height, so that one side of the stator core is provided with grooves (18) extending through the core;
- c) producing a subassembly by inserting a stator winding (17) into the grooves (18) of the stator core (13) formed in step b);
- d) bending the subassembly in a circular fashion to produce a cylindrical cavity, so that the grooves (18) end in the cavity; and

e) in order to keep the subassembly in a configuration with the cylindrical cavity, connecting at least two ends (23) of the stator core (13) to each other by means of a welding seam (20);

wherein a welding seam depth ( $T_s$ ) of the welding seam (20) is such that it gives the welding seam a sufficient strength to absorb tensile forces occurring in the welding seam, but at the same time the welding seam does not exert too excessive a negative influence on magnetic properties at a welding point due to structural changes occurring in the yoke, and therefore the welding seam depth ( $T_s$ ) of the welding seam (20) is selected as a function of the yoke height ( $H_{yoke}$ ) and a tolerance value ( $\Delta T_s$ ) and is given by in accordance with the following formula (I):  $T_s = 0.5 \text{ mm} * (H_{yoke}/\text{mm} - 1) \pm \Delta T_s$  (I).

20. (previously presented) The electric machine as defined in claim 19, consisting of a generator.

21. (previously presented) The electric machine as defined in claim 19, wherein the tolerance value ( $\Delta T_s$ ) equals 1.0 mm.

22. (previously presented) The electric machine as defined in claim 19, wherein the tolerance value ( $\Delta T_s$ ) equals 0.5 mm.

23. (previously presented) The electric machine as claimed in claim

19, wherein the welding seam depth ( $T_s$ ) of the welding seam (20) is not less than a minimum value ( $T_{smin}$ ) and said minimum value ( $T_{smin}$ ) depends on the yoke height ( $H_{yoke}$ ) and is described by the following formula (II):  $T_{smin} = \{3/40\} * H_{yoke}$ .